

## Abstract

Force sensor comprising organic field effect transistors and pressure sensor, position sensor and  
5 fingerprint sensor that are based on said force sensor

The invention relates to a force sensor based on an organic field effect transistor (10) applied on a substrate (1; 11), in which a mechanical force acting  
10 on the transistor causes a change in its source-drain voltage or its source-drain current ( $i_D$ ) which corresponds to said force and which can in each case be detected as measurement quantity ( $V_{meas}$ ,  $I_{meas}$ ) for the acting force, a diaphragm-based pressure sensor that  
15 uses a force sensor of this type, a one- or two-dimensional position sensor that uses a multiplicity of force sensors of this type, and a fingerprint sensor that uses a multiplicity of such force sensors.

20 (Figure 1)